

# Saving **eyes**

a matter of seconds



**TOBIN**   
EYEWASH SYSTEM

# An effective sterile and safe eyewash for industrial use.

An eyewash should be quick, simple and safe to use. The unique shape of Tobin's eyewash bottle insures that even a temporarily blinded and confused person can identify it as a safe eyewash.

## TOBIN EYEWASH safety features

### BOTTLE CAP/AIRVENT

The bottle hangs by its cap. To open simply break off the cap. An unopened bottle can be removed/replaced in the stand at will. An open bottle cannot be replaced in the stand.

### NON REFILLABLE

The Tobin bottle cannot be refilled. This is a very important safety feature as sterile liquid must not be saved in an open bottle. A safe sterile eyewash container must not be reusable.

### DIRECTIONAL ARROW

An arrow is engraved on the bottle. A blinded person can easily follow the arrow with their thumb and open the bottom airvent.

### BOTTOM AIRVENT

When the bottom airvent is activated it lets air into the bottle and insures the eye is washed by a soft continuous flow. The flow can be stopped, to allow blinking and eye movements, by placing the thumb over the bottom hole.

### EYE SUPPORT RING

Facilitates prolonged washing and washing during transportation to a doctor.

### THE FLOW

The eye is washed by a soft flow consisting of 6 tiny streams. A damaged eye must not be washed with a hard/sharp jet.

### NO MECHANICAL PARTS

The blow-moulded bottle has no moving or mechanical parts which can malfunction. The bottle is simple to open and easy to use..

### INSTRUCTIONS & EXPIRY DATE

Clear, simple instructions for use on each bottle & stand in your own language. Each bottle also shows the recommended expiry date.

### ROUND BOTTOM

Tobin's eyewash bottle has a round bottom and cannot stand alone. This is a particularly important safety feature which removes the temptation to take bottles from the stand and place them close to bottles with other contents. Mix-ups can never occur. It is important everyone KNOWS where the bottles are when an accident occurs.



**TOBIN'S EYEWASH SYSTEMS** are a well proven, quick and safe way to wash chemicals from the eyes. This specially designed system gives the fastest possible application combined with a volume large enough for most eye accidents.



*Secure eyewashing in four easy steps*

#### WITHIN ARMS REACH

Chemicals in the eye cause serious damage within 1-5 seconds (see page 7). Washing that begins within a few seconds can be decisive in minimizing eye damage. A temporarily blinded person trying to reach an eyewash a few meters away requires presence of mind, a good sense of direction and an obstacle free passage. An eyewash should be within arms reach.

#### CONTROLLED FLOW

According to Prof. Tengroth at the Eye Clinic at St. Eriks Hospital in Stockholm it is important that damaged eyes are washed by a soft flow. Tobin's bottle is constructed to empty under natural pressure giving a soft flow. When the bottom airvent is opened a patient cannot increase the flow by squeezing the bottle. A bottle gives approx. 3 minutes washing time.

#### SHELF LIFE

As the bottles are disposable, costly refill routines are unnecessary. The contents of the bottle have a 3 year shelf life. Each bottle has an expiry date clearly visible.

#### VOLUME

Uninterrupted washing over a long period is particularly important. The 5 bottle stand gives approx. 15 minutes washing. Further bottles can be taken from other stands if required.

#### TRANSPORT

Bottles can easily be removed from the stand and taken along during transportation to a doctor. It is very easy to open the bottles by hand. It is possible to control the flow by placing the thumb over the bottom hole.

#### DUST COVERS

A simple plastic bag accompanies each bottle. It keeps the bottles clean in dusty/dirty environments.

#### LOW PRICE

The cost of a wallstand with 5 bottles is low, making it possible to give each danger spot its own eyewash station.

#### STERILITY

The regulations governing sterile liquids are rigorous. The bottle cannot contain any bacteria during its shelf life. When a bottle is opened the contents must be used within few hours or thrown away. The manufacturing of all Tobin eyewash liquids comply with the European and Swedish regulations in the standards SS-EN ISO 9002, SS-EN 46002, SS-EN 552 and SS-EN 556. They also comply with the German DIN 12930 standard.

#### EASY TO OPEN

The bottles are easy to open as is illustrated on each individual bottle and on most stands.

# Systems installed in thousands of world wide Companies

What ever your needs are, we have a solution for your eyewashing needs.

## STATIONARY STAND (124), (424)

5x1 litre eyewash in a wallstand for stationary work places. Supplied complete with bottles, wall screws etc.

Measurements  
36x46x11,5 cm



## DUST PROTECTED CABINET (130), (431)

2x1 litre eyewash in a dust protected cabinet. Saline or **Buffered** solution. Suitable for all work places, e.g. industries, building sites, storage facilities etc. Supplied complete with bottles and wall screws.

Measurements:  
39x26x12 cm

## MOBILE STAND (127), (425)

2x1 litre eyewash in stand. Saline or **Buffered** solution. for mobile units such as trucks, boats, trains etc. Plastic (PP) stand. Supplied complete with bottles, wall screws etc.

Measurements:  
36x21x11.5 cm





**STATIONARY STAND  
(164), (430)**

0,5 litre eyewash in wallstand.  
Saline or **Buffered** solution.  
Suitable when space is a problem  
and/or eyewashes are required in a  
number of spots in the same area.  
Supplied complete with bottles,  
wall screws etc.  
Measurements:  
27,5x10,5x10 cm

**FREESTANDING  
FLASK (125), (427)**

0,5 litre freestanding eyewash.  
Saline or **Buffered** solution.  
Suitable when space is a problem  
and/or eyewashes are required in a  
number of spots in the same area.  
Supplied complete with bottles,  
wall screws etc.  
Measurements:  
27,5x8x7,5 cm



**STATIONARY  
STAND (129), (429)**

2x1 litre eyewash in wallstand.  
Saline or **Buffered** solution.  
Suitable when space is a problem  
and/or eyewashes are required in a  
number of spots in the same area.  
Supplied complete with bottles,  
wall screws etc.  
Measurements:  
36x21x11,5 cm

**REPLACEMENT  
BOTTLES (128), (428)**

Including 5 bottles.  
Measurements:  
36x46x11,5 cm



**REPLACEMENT  
BOTTLES (126), (426)**

Including 2 bottles.  
Measurements:  
36x21x11,5 cm

# Every second counts

Chemicals are extremely dangerous in the eyes. It is important to begin washing within seconds. If it is not practical to have an eyewash station within arms reach, it is possible to carry a personal Pocket Eyewash Flask in the breast pocket.

## POCKET EYEWASH FLASK (121, 421)

The Pocket Flask is not sufficient in itself to wash chemicals from the eyes, but is used on the way to a proper eyewash station. The flask is simple to open and is used in a forward leaning position which allows a person to move freely. It is very suitable for laboratories, building sites, cleaning stations or anyone with mobile working conditions.



The Tobin pocket eyewash flask for breast and back pocket



### POCKET EYEWASH FACTS

Contains 200 ml sterile saline/buffered solution 0.9 %. Shelf life 3 years. Expiry date on each bottle. Flask label in your own language. Complies with European standards SS-EN 15154-4:2009, SS-EN ISO 9002, SS-EN 46002, SS-EN 552, SS-EN 556 and DIN 12930. Weight 200 gram. Measurements 18x8,5x3,5 cm.

### LEATHER COVER (105)

For the Pocket Flask. Suitable for farming and road equipment, trucks etc.

### WIRE STAND (405)

For the Pocket Flask. Suitable for farming and road equipment, trucks etc.

# When an accident occur.. for how long should eyes be washed?

Eye accidents occur without warning. Common to all accidents are acute pain and a sense of blindness. An intense burning sensation makes it feel as if the eyes are on fire. We asked Professor Björn Tengroth, Head of the Eye Clinic at St. Eriks Hospital in Stockholm how quickly washing should begin and how long time it should continue. Prof. Tengroth replied that it is extremely important to begin washing immediately. Seconds are decisive. A flow of liquid is important as the purpose is to dilute and wash the chemicals out of the eyes.

**DEGREASING  
AGENTS**  
1-3 MINUTES

**ACIDS**  
2-4 MINUTES  
SEE A DOCTOR

**ALKALINES**  
10 - 20 MINUTES  
WASH DURING TRAN-  
SPORT TO A DOCTOR

According to Professor Tengroth chemicals can, for our purposes, be divided into three categories namely, Degreasing agents, Acids and Alkalines. The following applies.

## MECHANICAL INJURIES

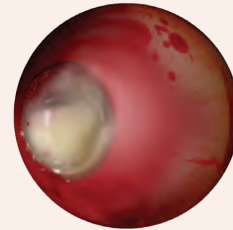
**Wash not less than 1 minute.** Injuries caused by foreign particles in the eyes such as dust and dirt (not chemicals) should be washed until all particles are gone. Wash carefully under the eyelids.

## DEGREASING AGENTS

**Wash not less than 2-3 minutes.** Chemicals such as benzene, toulol etc. cause pain and burning in the eye. The eye becomes red and the tears flow.

**Course of action:** Begin washing at once and continue until the eye is comfortable again. These chemicals seldom cause serious damage.

**TOBIN'S EYE RINSE (120)**  
Suitable for dust and dirt in the eyes, skin burns or wounds. 20 ml sterile saline solution 0.9%. Fits a First Aid Box. Expiry date on each bottle. Shelf life 3 years. (120) 10 bottles/carton

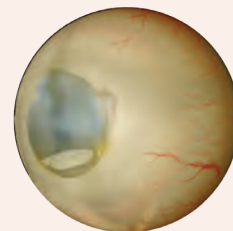


## ACID INJURIES

**Wash up to 5 minutes.** When acid reaches the eye, damage begins within 5 seconds. The reaction in the eye is severe. The acid eats into the soft eye. The combination of acid and tears causes some dilution but damage can be considerable. In time tissue and proteins coagulate and the acid stops corroding in the eye. At this stage the injury does not get worse even if no treatment is applied. The acid is said to remain on the surface. The damage can be very considerable.

**Course of action:** Washing must begin within 5 seconds. Speed is more important than anything else. Every second's delay aggravates the situation. Damage increases by the second.

**Washing period:** The damage seldom increases after 1-2 minutes. Washing for 3 minutes should be sufficient. However, to restore a feeling of comfort a further 2 minutes washing is recommended. These time periods apply only if a predominant part of the liquid makes contact with the eye. The patient should always see a doctor.



## ALKALINE INJURIES

**Wash for 10-20 minutes - should always see a doctor.**

Alkaline substances such as lye, caustic soda, lime, cement, ammoniac etc. cause a very aggressive reaction in the eye. The reaction time is even shorter than the one for acids. The importance of speed in beginning washing cannot be sufficiently stressed. All alkaline substances begin eating into the eye immediately. Alkalines "never" stop corroding in the eye. They must be washed out of the eye. Without treatment the damage will be very extensive and irreversible. Ammoniac has been found in the inner eye after only 25 seconds.

**Course of action:** Lightning fast treatment and prolonged washing are extremely important. Eyewashing equipment should be within arms reach and must be designed so that washing can continue during transportation to a doctor.

**Washing period:** A 10-20 minutes washing period is recommended. In alkaline cases only a doctor can decide when it is safe to discontinue washing.



UPPSALA  
UNIVERSITET

## UNIVERSITY STUDY

In a much publicized report from the Biomedicum Center, Uppsala University, Sweden eyewash bottles containing tap water were collected from the University and examined. These bottles were designed to be bottled with tap water and re-used. The study showed that the number of microorganisms in each bottle was very high indeed, in fact, 102 – 106 per ml liquid. The bottles were also found to be difficult to wash and disinfect. When the first bacteria count was complete the water was changed and the following day a new bacteria count was completed. The contamination level this time was as high as 105 per ml solution, a dangerously high rate. The investors point out that eye drops and pharmaceuticals are governed by stringent regulations requiring them to be sterile. These are mainly used in undamaged eyes. Eyewashes on the other hand are always used on injured eyes and are not governed by any such restrictions. The study arrived at the conclusion that tap water is not suitable for use in the eyes and that Industrial eyewashes should be sterile and disposable.

The study can be requested from Tobin Sweden AB in Swedish, German, English or French.

## TRAINING

The time between an accident and permanent eye damage can be a matter of few seconds. Everyone should know how to act when an accident occurs. In Tobin Sweden's dvd "In the blink of an eye" (5 minutes) Professor Tengroth explains the dangers of the different types of chemicals and gives advice how to handle eye accidents. The film also shows an eye accident and how to treat it. The dvd is available in Swedish or English.



Space for resellers stamp:

## SAVING EYES

Tobin's Eyewash Systems are installed in thousands of world wide companies such as: ABB, AGA, Gas, Astra, Akzo Nobel, AssiDomän, Electrolux, Ericsson, Hydro Plast, Ikea, Statoil, Skanska, Swedish Armed Forces, Swedish Rail, Telia, Volvo etc.



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